Registration

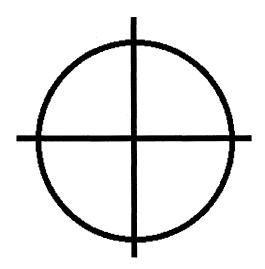
Introduction

To print images requiring more than one plate and ensure that the plates print in sequence or in close proximity to each other requires a system of registration. The more complicated a multiplate image is, the closer you must work with the camera person and printer.

Registration

Registration or register is the accurate placement of each overlay to a piece of master artwork. You should use three points on different planes for locating registration marks. Registration marks appear as circles centered on cross hairs. Place registration marks outside of the image area. Make sure the printer knows to remove registration marks before printing so they will not appear in the final product. The four types of registration are no register, loose register, lap register, and hairline register.

Figure 1-43 shows a registration mark.



DMJA0033

Figure 1-43.—A registration mark.

Registration, Continued

No register

With no register, each color or plate prints independently or without relation to all other plates. It does not require registered overlays, merely instructions to the printer.

Loose register

Loose register is used for images not requiring highly accurate placement of the color portions. You make a separate overlay for each color and key this overlay to the master art. Simplicity in the master artwork is paramount.

Lap register

Lap register permits a slight overlay in the separate colors or plates. This simplifies the DM's task in creating the overlays and eliminates white gaps or spaces which occur if the registration is off. Colors of similar densities that overlay form a black line, while lapping patterns or textures requires you to draw a red line between them to avoid moire.

Figure 1-44 shows lap registration.

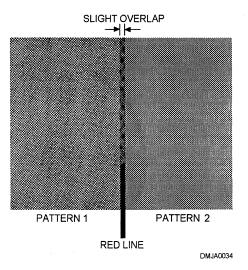


Figure 1-44.—Lap registration.

Hairline register

A hairline register should be left for photomechanical separation by the camera person or printer. The overlap in a hairline register is negligible. Save this registration technique for full color or full color continuous tone art.

Proofreader's Marks

Introduction

Copy preparation symbols, accepted by the printing trade, are standard throughout the United States. Study the symbols and marks. Knowledge of copy preparation symbols enables you to intelligently communicate with print shops and photo labs. Careful application of theses standards eliminates poor work before it reaches the printer.

Proofreader's and editorial marks

Proofreader's marks and editorial marks are essentially the same. The main difference is in their use.

EDITORIAL MARKS: Editorial marks are made directly to the manuscript in the body of the copy. If this is not possible, insert corrections above or below the line of type and indicate placement with a carot(Λ). If there are several corrections, place them in the right margin, in sequence and separated with a diagonal line.

PROOFREADER'S MARKS: Place proofreader's marks in the margins of a proof with their position indicated in the text with a carot. If there are several errors in the same line, place the marks in sequence, separated by a diagonal line. If the lines of type are long, divide the page down the center and place the corrections in the margins on the side of the page where the error occurs. If you are marking cold-type proofs, place a tissue overlay over the text and mark the corrections on the overlay.

Marks

Figure 1-45 shows editorial marks for copy preparation.

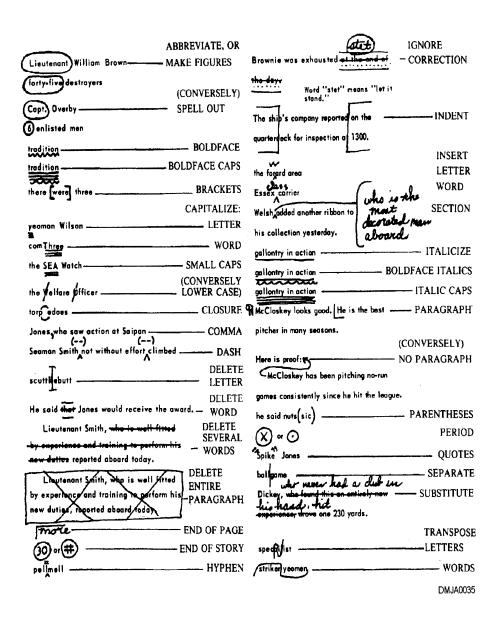


Figure 1-45.—Editor's marks.

Figure 1-46 shows proofreader's marks for text.

TEXT

TEXT				
Text	Margin	Meaning		
X or X		Broken type		
••••	Stet	Let it stand		
- or or 🔑	e	Delete		
Ø.		Delete and close up		
9		Correct position		
== or <i>-</i>	caps or uc	Capitalize		
t	caps or uc	Capitalize word		
==	sm caps or sc	Small Caps		
==	caps and small caps or uc & sc	Capitals and small capitols		
/or \	lc	Lower case		
ı	lc	Lower case word		
\lor		Superscript		
☆		Subscript		
	lf	Light face		
~~~	bf	Bold face		
	ital	Set in italics		
rom	rom	Set in roman		
wf	wf	Wrong font		
	Sp	Spell out		
0	sp	Mispelling		
	·	Ellipsis		
0		Move material to (shown by arrow)		

DMJAA036

Figure 1-46.—Proofreader's marks for text.

Figure 1-47 shows proofreader's marks for spacing.

## **SPACING**

Text	Meaning
1/N  or  1/EN	En-dash
1/M  or  1/EM	Em-dash
2/M  or  2/EM	Two Em-dash
	Indent one em or insert one em quad
	Indent two ems
Я	New paragraph
No ¶	No paragraph
<b>P</b> →	Flush paragraph
	Runover to next line
	Runover to preceding line
out—see copy	Omitted matter
ld≻	Insert lead
#	Insert space
hr#	Insert hair space
l/s or 1s#	Letterspace
√or eq#	Equalize space
	Less space between words
	Close up space

DMJAB036

Figure 1-47.—Proofreader's marks for spacing.

Figure 1-48 shows proofreader's marks for punctuation.

# **PUNCTUATION**

Text	Meaning
⊙ or ./	Period or full point
۸ or , /	Comma
= or /=/	Hyphen
① or :/	Colon
③ or /	Semi-colon
<b>\( \psi\)</b>	Apostrophe or single quote
!/	Exclaimation point
?/	Question mark or interrogation point
<b>①</b>	Query to author
(/) or ( ) or (   )	Parentheses
[] or [ ]	Brackets
{ }or { }	Braces
^ or ∨	Carot (insertion)
" " V	Double quotation marks
· · ·	Single quotation marks

DMJAC036

**Figure 1-48.**—Proofreader's marks for punctuation.

Figure 1-49 shows proofreader's marks for alignment.

# **ALIGNMENT**

Text	Meaning
=	Align horizontally
	Align vertically
ᄀᄃ	Center horizontally
ם כ	Center vertically
. С	Move left
٦	Move right
	Bring indented matter left
7	Bring indented matter right
П	Move up
Ц	Move down
∽ or ⊔	Transpose

DMJAD036

Figure 1-49.—Proofreader's marks for alignment.

# Preliminary review

Before reviewing text and illustrations, do a preliminary review. Run through the copy several times, looking for different errors each time. A checklist will make sure the proofreader does a thorough job searching for errors. Start at the beginning of the copy for each step in the following checklist.

### Preliminary review:

Step	Action
1	Review the copy to see if all pages are in sequence and the artwork is available.
2	Locate the cover. Write the word "cover" in the upper-left corner and circle the word. If the cover is art, write on a blank piece of paper the same size as the artwork and write "cover-see artwork submitted." This is page number one.
3	Number the pages. At the end of the last page write "all" and circle it.
4	Check to make sure the classification is correctly marked on each page and that the distribution statement is correct.

Now you are ready to concentrate on the text review.

#### Text review

Once you complete the preliminary review, begin marking type styles and sizes. Stamp or write, in the upper-left corner of each page, the type style and size, desired leading, and the width of the line. Mark headings, legends, and display lines separately maintaining uniformity throughout the document. Mark legends for type size and length of line. Key artwork into the manuscript by inserting the notation "illustration no. ____ inserted here." Make sure all text to be set in italics, small caps, and caps are correct. Underlining a word indicates italics, two underlines means set the text in small caps, three underlines means large caps and a wavy underline means set the word in boldface.

# Margin and indentation review

Review the copy again, this time mark all indentations. It is not necessary to mark paragraphs if they are clearly indicated in type. Marks for paragraphs include the paragraph sign (¶), or the em square(□). Mark "fl" next to lines that run flush. Mark unusual indentations. Numbers 1 through 9 are indented 1 em or 1 en (1 nut), while two-digit numbers are set flush to align figures set in type. Set tables one type size smaller than the main body type and set box heads one type size smaller than table type.

### Clarity

Nothing should be left for the printer to question. Mark anything that is not easily understood. Emphasize mathematical symbols, Greek letters, unusual spellings and abbreviations. Indicate that these irregularities must remain by marking "stet" or "follow" next to them. If making notations on the copy, circle it so that the printer does not confuse it with the copy. Once you complete your review of the text, edit the copy again to make sure you are consistent with your marks and instructions.

Clarity (Continued)

Figure 1-50 shows an example of text marked for the printer.

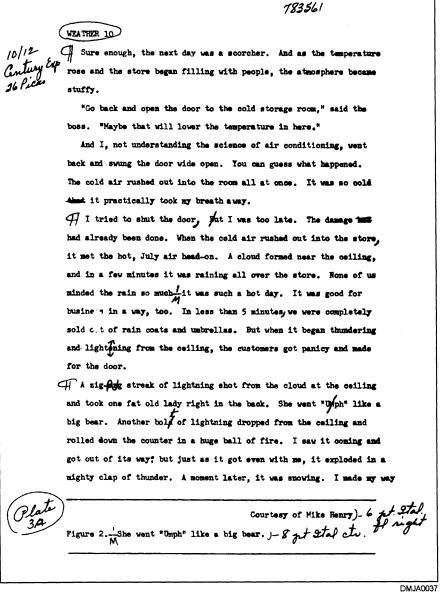
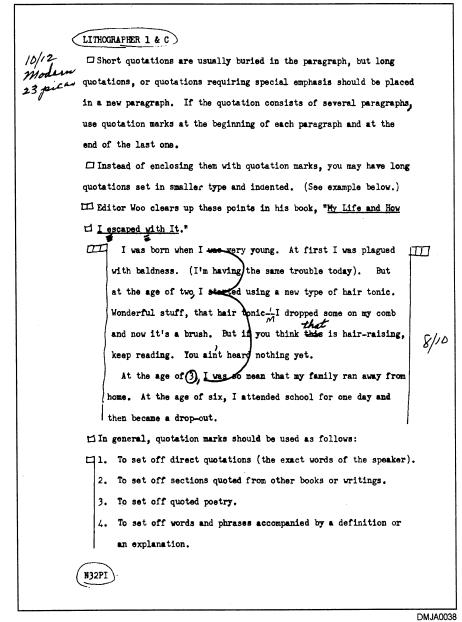


Figure 1-50.—Text marked for the printer.

# Clarity (Continued)

Figure 1-51 shows an example of paragraph and indentation marking for the printer.



**Figure 1-51.**—Paragraph and indentation marking for the printer.

Artwork review In reviewing artwork, you must be able to determine if it will reproduce properly. Submit original art for reproduction. The artwork should be of higher contrast than the contrast desired in the final reproduction. Use the following checklist to review artwork.

## Artwork review:

Step	Action
1	Check each piece of artwork for copyright. If you use copyrighted material, review the letter of permission to make sure your use falls within specified parameters and a credit line appears to indicate its source.
2	Check line resolution. Lines should be dense and black without filling in or blurring.
3	Check the accuracy of the crop marks.
4	Review the instructions to the camera operator for clarity.
5	Check each overlay for the correct color notations and registration marks.
6	Make sure the preferred reproduction treatment and finished shape appears on each piece of art.
7	Each piece of art should have the title of the job and a figure number assigned. Assemble all of the artwork in sequence, number them consecutively and write the plate number on the flap or cover attached to the illustration.

Paste-up review The mechanical is ready for review after all text and illustrations are scaled, cropped, typeset, proofed, checked, and pasted into place. This is the last chance for correction before the printer begins to prepare press plates.

To review the mechanical, follow this table:

Step	Action
1	Review the mechanical for cleanliness.
2	Erase all pencil guidelines.
3	Remove excess adhesive.
4	Examine line resolution for breaks or irregularities
5	Eliminate smearing and smudges.
6	Make sure all instructions are clear and convey exactly the preferred finish treatment.

# **Quality Control**

### Introduction

Vigorously control the quality of the mechanical before it leaves the shop to minimize production expenses and needless delays poorly executed mechanicals create. But, quality control extends beyond the shop and into your follow-up with the print shop.

### **Precautions**

Once the job is sent to the printer, periodically check on its progress. Anticipate problems and offer assistance. Do not change a job in progress. During lengthy preparation periods, inform the originator on the progress of the job and any problems with the job. Insist on quality at every stage of execution.

# **Summary**

#### Review

This chapter covers traditionally created mechanicals for offset lithography from prepress considerations to quality control of the finished publications. Good preparation and planning are paramount in typesetting, copyfitting, scaling, cropping, retouching, and pasting copy for reproduction. Follow the tables within this text or develop your own checklists to ensure professional quality mechanicals leave the shop. Avoid common pitfalls in printing. The time you save by thorough preparation is phenomenal.

#### **Comments**

The skills Lithographer's Mates possess for reproducing material of uncompromising quality is greatly undervalued in the charged atmosphere of electronic digitization. For a real education on printing and the effects of good and poor mechanical preparation, find a Navy Print shop and follow a job from the time it enters the shop until the time it leaves. Obtain and complete the LI training manual. There is no better way to learn the subtilies of creating artwork for reproduction or halftones, and negatives of correct density than to experience it. Learn quickly before it becomes a skill lost to technology.